

Supplementary material

Table S1. Mean cover (%) of the bird-dispersed plant species occurring in the nine studied patches. n = number of 50-m line transects carried out at each patch.

Bird-dispersed species	Large patches				Small patches				
	AZN n = 12	DBL n = 12	CHP n = 12	DHY n = 12	GBL n = 12	CRB n = 11	SJV n = 12	PTR n = 6	TRZ n = 8
<i>Asparagus acutifolius</i>						1.05		0.24	
<i>Asparagus aphyllus</i>		0.35		0.03	1.10	0.87			
<i>Crataegus monogyna</i>			0.15	0.17		2.07	0.72		
<i>Daphne gnidium</i>	0.23		0.08	0.10	0.53		0.68		
<i>Lonicera implexa</i>					0.17				
<i>Myrtus communis</i>	7.95	8.00	3.13	8.07	0.85	0.75	6.38	2.96	12.18
<i>Olea europaea</i> var. <i>sylvestris</i>	8.32	0.58			5.08	0.75		0.10	15.10
<i>Osyris alba</i>					1.25				
<i>Osyris lanceolata</i>				0.45					
<i>Phillyrea angustifolia</i>	0.68		0.43	0.45	0.78	0.65	10.52	0.64	2.05
<i>Pistacia lentiscus</i>	9.33	3.98	2.38	18.78	10.52	14.80	19.13	18.80	14.80
<i>Rhamnus lycioides</i>	0.03	0.60		0.57	0.38	0.24		1.56	1.53
<i>Rubia peregrina</i>				0.23	0.38				
<i>Smilax aspera</i>				0.52	1.62				0.23
<i>Tamus communis</i>					0.12	0.84			

Table S2. Abundance (birds 300 m⁻¹; mean \pm SD) of potential frugivorous birds occurring in the nine patches studied. The type of frugivory performed by each species is given as “SD” for legitimate seed dispersers and “SP” for seed predators. The residency status is given as “R” for year-round residents and “OW” for over-wintering birds. Frequency of large flocks (>10 birds) of sparrows (*Passer* spp.) observed in the immediate matrix is indicated as A, observed in almost all visits; S, some visits; and N, no visit. n = number of transects conducted at each site.

Frugivore species	Type of frugivore	Residency status	Large patches					Small patches				
			AZN n = 10	DBL n = 10	CHP n = 10	DHY n = 10	GBL n = 5	CRB n = 5	SJV n = 5	PTR n = 5	TRZ n = 5	
<i>Columba palumbus</i>	SD	R/OW	0.1 \pm 0.3	0.2 \pm 0.4	0.1 \pm 0.3	0.6 \pm 1.6	0.2 \pm 0.4	0.2 \pm 0.4				
<i>Cyanopica cyana</i>	SD	R	1.0 \pm 1.4	2.4 \pm 4.2	2.2 \pm 3.3							
<i>Erithacus rubecula</i>	SD	OW	8.7 \pm 1.9	9.2 \pm 1.3	10.4 \pm 2.2	10.6 \pm 2.6	7.4 \pm 1.1	8.0 \pm 2.3	9.8 \pm 2.2	6.8 \pm 2.9	7.4 \pm 1.5	
<i>Phoenicurus ochruros</i>	SD	OW				0.3 \pm 0.7		0.8 \pm 0.8			0.8 \pm 0.8	
<i>Sturnus</i> spp. ‡	SD	R/OW		0.1 \pm 0.3	1.1 \pm 1.7	0.2 \pm 0.6	0.2 \pm 0.4					
<i>Sylvia atricapilla</i>	SD	OW	15.7 \pm 5.0	4.0 \pm 2.1	6.8 \pm 3.4	9.0 \pm 3.7	11.2 \pm 1.5	20.8 \pm 6.1	15.6 \pm 4.4	3.8 \pm 2.8	5.6 \pm 1.7	
<i>Sylvia melanocephala</i>	SD	R	12.2 \pm 3.8	8.4 \pm 2.5	12.0 \pm 2.7	12.8 \pm 2.9	6.4 \pm 2.3	12.4 \pm 1.5	13.4 \pm 3.6	4.8 \pm 2.2	3.8 \pm 1.3	
<i>Turdus merula</i>	SD	R	2.4 \pm 1.5	3.9 \pm 1.4	4.2 \pm 1.4	1.5 \pm 1.2	2.0 \pm 1.6	2.4 \pm 1.5	0.6 \pm 0.9	1.6 \pm 1.7	6.0 \pm 1.0	
<i>Turdus philomelos</i>	SD	OW	5.5 \pm 3.2	0.7 \pm 0.8	1.2 \pm 1.3	3.2 \pm 1.4	4.8 \pm 3.1	8.8 \pm 4.7	9.6 \pm 1.8	0.6 \pm 0.5	10.2 \pm 2.7	
<i>Carduelis chloris</i>	SP	R	5.8 \pm 2.4	4.5 \pm 2.5	7.0 \pm 3.2	3.5 \pm 5.2	4.8 \pm 3.6	6.4 \pm 2.1	3.4 \pm 3.4	3.0 \pm 3.0	3.0 \pm 1.4	
<i>Fringilla coelebs</i>	SP	R	4.2 \pm 3.0	3.2 \pm 1.1	3.4 \pm 2.1	2.5 \pm 2.0	3.6 \pm 2.9	3.0 \pm 0.7	3.0 \pm 1.9	1.0 \pm 1.0		
<i>Passer</i> spp. § (flocks observation)	SP	R			0.2 \pm 0.6	0.6 \pm 1.1	0.2 \pm 0.4	9.2 \pm 3.6	1.0 \pm 2.2	4.6 \pm 1.8	2.8 \pm 0.8	
			N	N	N	N	A	A	S	A	A	

‡ Includes *S. sturnus* and *S. unicolor*.

§ Includes *P. domesticus* and *P. hispaniolensis*.

Table S3. Similarity (PS index) in assemblages of avian seed dispersers (above diagonal, n = 10 bird species) and bird-dispersed plants (below diagonal, n = 15 plant species) between the nine patches studied.

Patches	Large patches				Small patches				
	AZN	DBL	CHP	DHY	GBL	CRB	SJV	PTR	TRZ
AZN		0.698	0.746	0.819	0.909	0.894	0.910	0.799	0.642
DBL	0.638		0.901	0.780	0.663	0.593	0.648	0.788	0.629
CHP	0.612	0.973		0.871	0.733	0.640	0.696	0.791	0.639
DHY	0.604	0.612	0.683		0.799	0.752	0.805	0.884	0.628
GBL	0.591	0.460	0.396	0.435		0.894	0.878	0.769	0.708
CRB	0.338	0.496	0.583	0.566	0.516		0.877	0.723	0.653
SJV	0.526	0.628	0.839	0.730	0.410	0.530		0.792	0.686
PTR	0.411	0.404	0.398	0.651	0.437	0.655	0.572		0.622
TRZ	0.926	0.614	0.550	0.569	0.595	0.341	0.507	0.431	